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Title UTD Radiation Pattern of Slot Antennas on an Elliptic Cylinder

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Abstract

This report presents the far-field radiation patterns of slot antenna on an elliptic cylinder (ECL). The ray-asymptotic formulation uniform theory of diffraction (UTD) is employed for this purpose. The surface-ray parameters are determined using geodesic constant method (GCM). The radiation patterns obtained are validated against the exact solution.